

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/009351

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01J19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B01J B01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95/11755 A (BEATTIE KENNETH L ;HOUSTON ADVANCED RES CENTER (US)) 4 May 1995 (1995-05-04) abstract page 7, line 23 - page 9, line 20 page 14, line 6 - page 15, line 19 page 17, line 15 - line 28 page 19, line 15 - page 20, line 7; claims; figures	1,2,5-24
X	WO 01/87484 A (MILLIPORE CORP) 22 November 2001 (2001-11-22) abstract page 1, paragraph 1 page 5, last paragraph - page 9, paragraph 5; figures	1,2,6, 9-24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

*** Special categories of cited documents:**

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

13 December 2004

Date of mailing of the international search report

21/12/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/034026 A (BIOCEPT INC ;HAHN SOONKAP (US); ROYCROFT PAT (US); TSINBERG PAVEL) 24 April 2003 (2003-04-24) abstract page 2, line 34 - page 4, line 6 page 5, line 8 - page 6, line 25; claims; figures	1,2,5-24
X	WO 03/052420 A (HRYCYNIA CHRISTINE A ; LEE GIL U (US); SZLEIFER IGAL (US); BASARAN OSMA) 26 June 2003 (2003-06-26) abstract page 2, line 10 - line 19 page 8, line 22 - page 9, line 22 page 17, line 15 - page 20, line 30; figure 5	1,2,5-24
A	US 6 225 131 B1 (MARIA KREUWEL HERMANUS JOHANNE ET AL) 1 May 2001 (2001-05-01) abstract column 2, line 30 - column 7, line 30	
A	EP 1 251 352 A (NISSHIN SPINNING) 23 October 2002 (2002-10-23) abstract page 2, line 42 - page 8, line 20; figures	
E	WO 2004/089532 A (PLACHOV DIMITRIJ ; GAVRUSHKIN ALEXANDER (RU)) 21 October 2004 (2004-10-21) page 3, line 12 - page 4, line 5 page 7, line 31 - page 8, line 24; figure 2	1,2,5-24
X	WO 01/19502 A (FOLEY BRIAN ;MILLIPORE CORP (US)) 22 March 2001 (2001-03-22) abstract page 4, line 7 - page 6, line 23 page 8, line 1 - page 9, line 22; figures	3-24
X	US 5 980 709 A (BECK THOMAS WILLIAM ET AL) 9 November 1999 (1999-11-09) abstract column 2, line 10 - column 3, line 2 column 3, line 31 - column 4, line 20; figures	3-24
A	US 2003/113528 A1 (MOYA WILSON) 19 June 2003 (2003-06-19) paragraph '0009! - paragraph '0019! paragraph '0032! - paragraph '0037! paragraph '0041! paragraph '0059!; figures; examples	
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/12846 A (PAMGENE B V ;VENEMA F (NL)) 22 February 2001 (2001-02-22) the whole document -----	
A	US 5 639 603 A (NEEDEL MICHAEL C ET AL) 17 June 1997 (1997-06-17) column 42, line 11 - column 44, line 53 example 1 -----	
A	KHAN J ET AL: "EXPRESSION PROFILING IN CANCER USING CDNA MICROARRAYS" ELECTROPHORESIS, WEINHEIM, DE, vol. 20, no. 2, February 1999 (1999-02), pages 223-229, XP008002229 ISSN: 0173-0835 figures -----	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 2, 5-10 (all in part), 11-13, 14-17 (all in part), 18, 19-24 (all in part)

Independent claim 1 relate to systems comprising a porous reaction substrate having a flat top and bottom surface in which the diameter of the pores is comprised between 10 micron and 10 nm and further comprising a first rigid support member bonded to the porous layer. This latter component comprises holes extending through the whole layer.

2. claims: 3, 4, 5-10(all in part), 11-13, 14-17 (all in part), 18,19-24 (all in part)

Independent claims 3 and relate to systems comprising a porous reaction substrate having a flat top and bottom surface in which the diameter of the pores is comprised between 10 micron and 10 nm. Some of the pores of the substrate are masked by filling them with a masking polymer so as to form borders of the reactor zones.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009351

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9511755	A	04-05-1995	AT 214633 T AU 700315 B2 AU 1043595 A CA 2174140 A1 DE 69430207 D1 DE 69430207 T2 DK 725682 T3 EP 1157743 A1 EP 0725682 A1 ES 2176308 T3 JP 9504864 T JP 3488465 B2 PT 725682 T WO 9511755 A1 US 2003044777 A1 US 5843767 A	15-04-2002 24-12-1998 22-05-1995 04-05-1995 25-04-2002 19-09-2002 15-07-2002 28-11-2001 14-08-1996 01-12-2002 13-05-1997 19-01-2004 30-09-2002 04-05-1995 06-03-2003 01-12-1998
WO 0187484	A	22-11-2001	EP 1284816 A2 WO 0187484 A2 US 2003062302 A1 US 2001042710 A1	26-02-2003 22-11-2001 03-04-2003 22-11-2001
WO 03034026	A	24-04-2003	EP 1444500 A2 WO 03034026 A2 US 2004191891 A1	11-08-2004 24-04-2003 30-09-2004
WO 03052420	A	26-06-2003	WO 03052420 A2	26-06-2003
US 6225131	B1	01-05-2001	AT 199663 T AU 724382 B2 AU 8863298 A CA 2290945 A1 DE 69800595 D1 DE 69800595 T2 DK 975427 T3 WO 9902266 A1 EP 1050588 A1 EP 0975427 A1 ES 2157669 T3 GR 3036010 T3 JP 3208390 B2 JP 2000515251 T PT 975427 T US 2002102565 A1 US 2002127738 A1 US 2002164584 A1	15-03-2001 21-09-2000 08-02-1999 21-01-1999 19-04-2001 18-10-2001 09-07-2001 21-01-1999 08-11-2000 02-02-2000 16-08-2001 28-09-2001 10-09-2001 14-11-2000 30-08-2001 01-08-2002 12-09-2002 07-11-2002
EP 1251352	A	23-10-2002	JP 2002357604 A CA 2382246 A1 EP 1251352 A2 US 2004161744 A1	13-12-2002 17-10-2002 23-10-2002 19-08-2004
WO 2004089532	A	21-10-2004	DE 10316689 A1 WO 2004089532 A1	28-10-2004 21-10-2004
WO 0119502	A	22-03-2001	EP 1214139 A2 WO 0119502 A2 US 2003113528 A1	19-06-2002 22-03-2001 19-06-2003

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009351

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5980709	A	09-11-1999	AU 693678 B2	02-07-1998
			AU 5260696 A	30-10-1996
			WO 9632635 A1	17-10-1996
			CA 2216911 A1	17-10-1996
			CN 1423124 A	11-06-2003
			CN 1181811 A	13-05-1998
			EP 0820586 A1	28-01-1998
			JP 11503826 T	30-03-1999
US 2003113528	A1	19-06-2003	US 2003098121 A1	29-05-2003
			DE 60012758 D1	09-09-2004
			EP 1214141 A2	19-06-2002
			WO 0119504 A2	22-03-2001
			US 6627291 B1	30-09-2003
			EP 1214139 A2	19-06-2002
			WO 0119502 A2	22-03-2001
			EP 1216089 A2	26-06-2002
			JP 2003509232 T	11-03-2003
			WO 0119505 A2	22-03-2001
WO 0112846	A	22-02-2001	AU 767709 B2	20-11-2003
			AU 7274100 A	13-03-2001
			CA 2378717 A1	22-02-2001
			WO 0112846 A1	22-02-2001
			EP 1206579 A1	22-05-2002
			JP 2003507695 T	25-02-2003
US 5639603	A	17-06-1997	US 5770358 A	23-06-1998
			AU 703472 B2	25-03-1999
			AU 1128095 A	23-05-1995
			BR 9407947 A	26-11-1996
			CA 2175587 A1	11-05-1995
			CN 1134156 A	23-10-1996
			EP 0726906 A1	21-08-1996
			GB 2298863 A ,B	18-09-1996
			JP 9508353 T	26-08-1997
			NZ 276860 A	22-09-1997
			WO 9512608 A1	11-05-1995
			US 6165778 A	26-12-2000
			US 6140493 A	31-10-2000
			US 6416949 B1	09-07-2002
			AT 148889 T	15-02-1997
			AU 669489 B2	13-06-1996
			AU 2661992 A	27-04-1993
			CA 2118806 A1	01-04-1993
			DE 69217497 D1	27-03-1997
			DE 69217497 T2	12-06-1997
			DK 604552 T3	04-08-1997
			EP 0604552 A1	06-07-1994
			EP 0773227 A1	14-05-1997
			ES 2097925 T3	16-04-1997
			GR 3023156 T3	30-07-1997
			JP 2001524926 T	04-12-2001
			US 6143497 A	07-11-2000
			US 6165717 A	26-12-2000
			WO 9306121 A1	01-04-1993
			US 5789162 A	04-08-1998
			US 5708153 A	13-01-1998